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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,553	03/19/2002	Motoya Iwasaki	A253-1	6682
21254	7590	07/16/2004	EXAMINER	
MCGINN & GIBB, PLLC 8321 OLD COURTHOUSE ROAD SUITE 200 VIENNA, VA 22182-3817			DEPPE, BETSY LEE	
			ART UNIT	PAPER NUMBER
			2634	11

DATE MAILED: 07/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/088,553	IWASAKI, MOTOYA
	Examiner Betsy L. Deppe	Art Unit 2634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 26 April 2004.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1 and 3-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 4-26, 28 and 30-36 is/are rejected.
- 7) Claim(s) 1, 3, 27 and 29 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 19 March 2002 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

## DETAILED ACTION

### *Drawings*

1. The drawings were received on April 26, 2004. These drawings are approved.
  
2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the following must be shown or the feature(s) canceled from the claim(s):
  - a. a first sub-correlator providing a correlation value output to a plurality of second sub-correlators, as recited in claim 1;
  - b. a maximum detecting means as recited in claim 3, 10 and 11; and
  - c. a means for receiving as recited in claim 35.

No new matter should be entered.

Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The

replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

3. The disclosure is objected to because of the following informalities: the sentence on page 26, lines 12-14 is grammatically awkward and does not make sense.

Appropriate correction is required.

### ***Claim Objections***

4. The claims are objected to because of the following informalities:

a. in claim 1, lines 2-3, the Examiner suggests changing "spreading a predetermined number of symbols comprising a fixed word, with a pseudorandom noise code" to "spreading a predetermined number of symbols with a pseudorandom noise code wherein the predetermined number of symbols comprises a fixed word" for clarification;

b. in the last three lines of claims 1, 4, 21, 22 and 25-30 and on lines 2-4 of claims 8 and 9, the Examiner suggests changing "a plurality of second sub-correlators a number of which is determined in accordance with types of said fixed word" to "a number of second sub-correlators wherein the number is determined in accordance

with a number of different fixed words" for clarification and to be consistent with page 25, lines 23-29 as understood by the Examiner. Although page 25 mentions "the number of kinds of fixed symbols" on lines 24 and 27, lines 27-29 seems to suggest that there are different fixed words and that each of the second sub-correlators are used to correlate one of the different fixed words. If this interpretation by the Examiner is incorrect, then it is unclear what is meant by "types of fixed word" in the last lines of the respective independent claims.

- c. in claim 6, line 19, "read" should be "reads";
- d. in claim 19, line 14, "K correlation values transmitted from said first sub-correlator" should be "stored K correlation values" for clarification;
- e. in claim 20, line 2, "which" should be "wherein the" for improved readability;
- f. in claim 20, line 3, the comma should be deleted;
- g. in claim 20, line 18, "K correlation values transmitted from said first sub-correlator" should be "stored K correlation values" for clarification;
- h. in claim 24, line 5, the first comma should be deleted;
- i. in claim 26, line 8, the comma should be deleted;
- j. in claim 35, "plurality-of" should be "plurality of"; and
- k. in claim 36, line 9, "correlators" should be "sub-correlators."

Appropriate correction is required.

5. Claim 34 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The limitation recited in claim 34 duplicates claim 28, lines 15-16.

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 26, 30 and 36 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

9. With regard to claim 26, the detailed description as originally filed does not describe a correlator with a comparator in combination with a plurality of second sub-correlators.

10. With regard to claim 30, the detailed description as originally filed does not describe a means for receiving data (see lines 7-9) in combination with a plurality of second sub-correlators (see lines 12-13).

11. With regard to claim 36, the detailed description as originally filed does not describe a plurality of sub-correlators connected in serial (i.e. "downstream" as suggested by lines 6-8) in combination with the number of these sub-correlators being determined in accordance with the types of fixed word. Figure 1(b) shows a plurality of sub-correlators connected in serial (i.e. "downstream") but the corresponding description does not describe determining the number of sub-correlators based on fixed words. Determining the number of sub-correlators based on fixed words corresponds to a different embodiment including the one as shown in Figure 5. Determining a number of sub-correlators to place in serial, as recited in claim 36, is not described in the specification as originally filed.

12. Claims 4-25, 28, 30-35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

13. In claims 4-6, 18-20, 22, 23 and 28, it is unclear what the first sub-correlator is receiving as an input signal and how it functions. For example, it appears that it receives a fixed pattern but it is unclear the how the "input signal" relates to the fixed pattern. Furthermore, it is unclear what is used to determine a correlation value. It is

also unclear how "said fixed pattern" relates to the correlation value and/or M chip length.

14. In claims 5, 23 and 32, it is unclear what is meant by "reads said memory for each of said predetermined number" on lines 16, 18 and 2, respectively.

15. In claims 6 and 24, it is unclear what is meant by "read from said memory for each of said L correlation values" on lines 19-20 and 20, respectively.

16. In claim 21, it is unclear whether the first and second sub-correlators are related to the correlator on line 2.

17. In claim 24, lines 6-7, it doesn't make sense for a correlator is be comprised of a "first sub-correlator value."

18. Claim 24 recites the limitation "the first sub-correlator" in lines 12-13. There is insufficient antecedent basis for this limitation in the claim.

19. Claim 25 recites the limitation "said fixed word" in lines 11-12. There is insufficient antecedent basis for this limitation in the claim.

20. With regard to claim 30, it is unclear what the means for receiving is receiving as an input signal and how it functions. For example, it appears that it receives a fixed pattern but it is unclear the how the "input signal" relates to the fixed pattern.

Furthermore, it is unclear what is used to determine a correlation value. It is also unclear how "said fixed pattern" on line 5 relates to the correlation value and/or M chip length.

21.

***Claim Rejections - 35 USC § 102***

22. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

23. Claim 18 is rejected under 35 U.S.C. 102(e) as being clearly anticipated by Davidovici et al. (US Patent No. 6,393,049 B1 cited in the Office Action mailed January 26, 2004, Paper No. 8). (See Figure 1; column 3, lines 15-60; column 5, lines 27-43; and column 6, lines 15-54)

***Allowable Subject Matter***

24. Claims 1, 3, 27 and 29 are allowable if the last three lines of the respective independent claims are amended as suggested by the Examiner.

***Conclusion***

25. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Betsy L. Deppe whose telephone number is (703) 305-4960. The examiner can normally be reached on Monday, Tuesday and Thursday (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on (703) 305-4714. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Betsy L. Deppe  
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